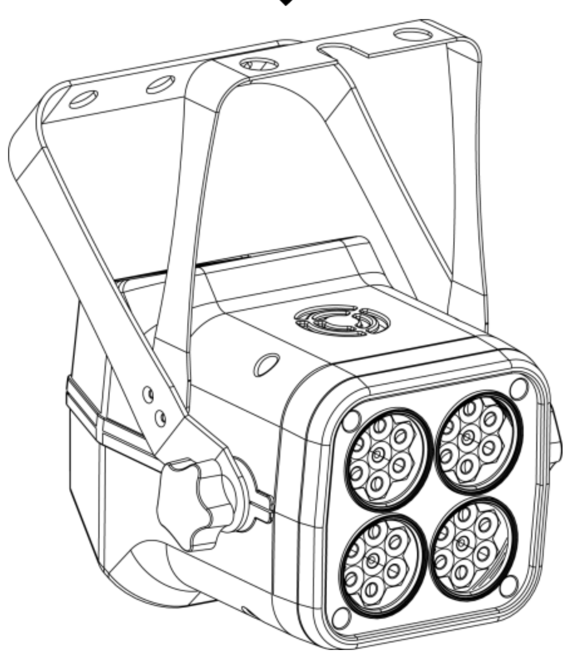
COLORdash™ Block

Snapshot

Use on Dimmer	⊘
Outdoor	⊘
Sound Activated	⊘
DMX	✓
Master/Slave	✓
Autoswitching Power Supply	✓
Replaceable Fuse	✓
User Serviceable	⊘
Duty Cycle	⊘

User Manual



CHAUVET
Value · Innovation · Performance

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(800) 762-1084 – (954) 929-1115
FAX (954) 929-5560
www.chauvetlighting.com

TABLE OF CONTENTS

1. BEFORE YOU BEGIN

What is included

- 1 x COLORdash™ Block
- 1 x Power cable with plug
- 1 x 6.6 ft (2 m) power linking cable
- 1 x Safety eyebolt
- 1 x Warranty Card
- 1 x User Manual

Unpacking Instructions

Immediately upon receiving a fixture, carefully unpack the carton, check the contents to ensure that all parts are present, and have been received in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or if the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

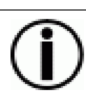
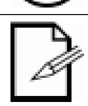
Manual Conventions

This manual uses the following conventions to differentiate certain types of information from the regular text.

CONVENTION	MEANING
[10]	A DIP switch to be configured.
<Menu>	A key to be pressed on the fixture's control panel
1 ~ 512	A range of values
Settings	An option shown on the display not to be modified (for example, showing the operating mode/current status)
MENU > Settings	A sequence of menu options to be selected
ON	A value to be entered or selected
"Appendix"	A section of the manual

Icons

This manual uses the following icons to indicate information that requires special attention on the part of the user.

ICONS	MEANING
	This paragraph contains critical installation, configuration or operation information. Failure to comply with this information may render the fixture partially or completely inoperative, cause damage to the fixture or cause harm to the user or technician.
	This paragraph contains important installation or configuration information. Failure to comply with this information may prevent the fixture from functioning correctly.
	This paragraph reminds you of useful, although not critical, information.

Safety Instructions

Please read these instructions carefully because they include important information about the installation, usage and maintenance of this product.

There are no user serviceable parts inside the unit. Any reference to servicing the unit you may find from now on will only apply to properly certified technicians. Do not open the housing or attempt any repairs unless you are one of them.

In the unlikely event that your unit may require service, please contact CHAUVET at (954) 929-1115.

- Keep this Manual for future consultation. If you sell the unit to another user, make sure that they also receive this Manual.
- Always make sure that you are connecting the unit to the proper voltage, as per the specifications.
- Always disconnect from power source before servicing or replacing fuse and be sure to replace with same fuse type.
- This product is for indoor use only! To prevent risk of fire or shock, do not expose fixture to rain or moisture.
- Secure fixture to fastening device using a safety chain.
- Maximum ambient temperature (Ta) is 104° F (40° C). Do not operate the fixture at temperatures higher than this.
- In the event of a serious operating problem, stop using the unit immediately!
- Never connect the device to a dimmer pack.
- Make sure the power cord is never crimped or damaged.
- Never disconnect the power cord by pulling or tugging on the cord.
- Avoid direct eye exposure to the light source while it is on.
- Do not daisy chain power to more than 20 units @ 120 V or 30 units @ 230 V.

Please refer to all applicable local codes and regulations for proper installation of this fixture.

LED Expected Lifespan

LEDs gradually decline in brightness over time. HEAT is the dominant factor that leads to the acceleration of this decline. Packaged in clusters, LEDs exhibit higher operating temperatures than in ideal or singular optimum conditions. For this reason when all color LEDs are used at their fullest intensity, life of the LEDs is significantly reduced. It is estimated that a viable lifespan of 40,000 to 50,000 hours will be achieved under normal operational conditions. If improving on this lifespan expectancy is of a higher priority, place care in providing for lower operational temperatures. This may include climatic-environmental and the reduction of overall projection intensity.

2. INTRODUCTION

Features

- 3, 4, 5, 9, 11 or 12-channel DMX LED wash light (with ID addressing)
- Operating modes
  - 3-channel: RGB control
  - 4-channel: RGB, dimmer
  - 4-channel: RGB+W control
  - 5-channel: RGB+W, dimmer
  - 11-channel: RGB+W, ID, dim, strobe, macro, fan control, automatic, custom
  - 12-channel: RGB for individual block control
- Blackout/static/dimmer/strobe/pulse
- RGB+W color mixing with or without DMX controller
- Built-in automated programs via master/slave
- Recall custom programs via master/slave or DMX
- Adjustable fan speeds

Additional Features

- High-power, 1 W (350 mA) LEDs
- Additional power output: (IEC) max 20 units @ 120 V or 30 units @ 230 V
- LCD display with password protection
- Control independent or multiple combinations of the LED modules/clusters
- Transfer custom programs between fixtures
- Double-bracket yoke that doubles as floor stand

Options

- 33 ft (10 m) power extension cable (EXT-2)

DMX Channel Summary

The COLORdash™ Block has six DMX channel configurations. These are referred to as "Personalities" in this manual and in the fixture onboard control panel. The six personalities are: STAGE 1, BLOCK, ARC 1, ARC 1 + D, ARC 2, ARC 2 + D. Each of the different personalities can be accessed from the control panel. Please see section on "Control Panel Functions" for a description on how to access these.

[STAGE 1]	CHANNEL	DESCRIPTION
	1	Dimmer
	2	Red
	3	Green
	4	Blue
	5	White
	6	Color Macro
	7	Strobe
	8	Auto & Custom Programs
	9	Auto Speed Adjustment
	10	ID Address Selection
	11	Block Selection

[BLOCK]	CHANNEL	DESCRIPTION
	1	Block 1 - Red
	2	Block 1 - Green
	3	Block 1 - Blue
	4	Block 2 - Red
	5	Block 2 - Green
	6	Block 2 - Blue
	7	Block 3 - Red
	8	Block 3 - Green
	9	Block 3 - Blue
	10	Block 4 - Red
	11	Block 4 - Green
	12	Block 4 - Blue

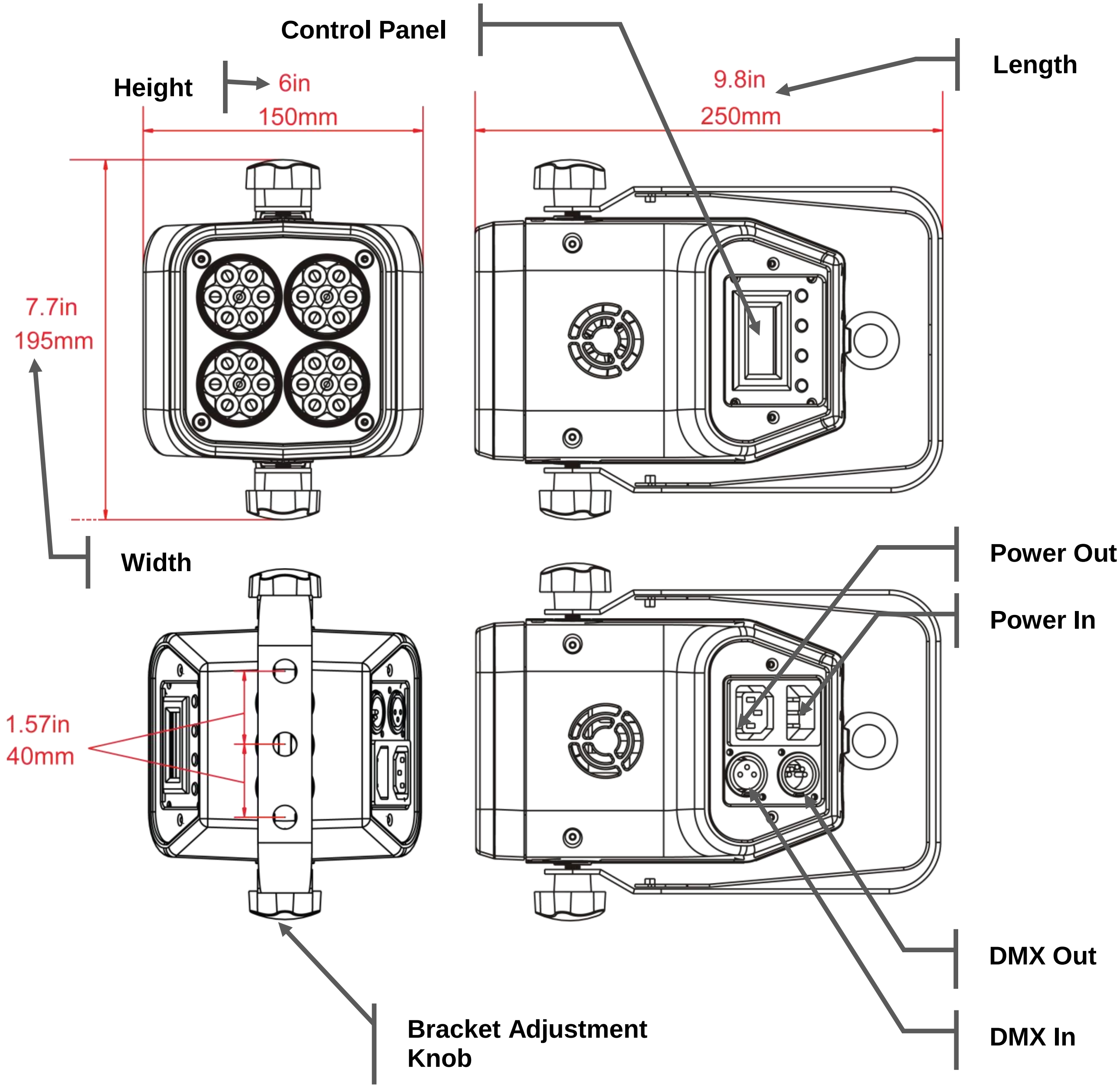
[ARC 1]	CHANNEL	DESCRIPTION
	1	Red
	2	Green
	3	Blue

[ARC1+D]	CHANNEL	DESCRIPTION
	1	Dimmer
	2	Red
	3	Green
	4	Blue

[ARC2]	CHANNEL	DESCRIPTION
	1	Red
	2	Green
	3	Blue
	4	White

[ARC 2+D]	CHANNEL	DESCRIPTION
	1	Dimmer
	2	Red
	3	Green
	4	Blue
	5	White

Product Overview



3. SETUP

AC Power

This fixture has an auto-switching power supply that can accommodate a wide range of input voltages (100 ~ 240 VAC, 50/60 Hz). Before powering on the unit, make sure the line voltage to which you are connecting it is within the range of accepted voltages.

This fixture is designed for power linking from one COLORdash™ Block to another COLORdash™ Block fixture. This is done with IEC extension cables.

Always connect the fixture to a switched circuit. Never connect the fixture to a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used only as a 0 to 100% switch.

To determine the power requirements for a particular fixture, see the label affixed to the back plate of the fixture or refer to the fixture's specifications chart. A fixture's listed current rating indicates its average current draw under normal conditions.

Always connect the fixture to a circuit with a suitable electrical ground.

Mounting

Orientation

This fixture may be mounted in any safe position, provided there is adequate room for ventilation.

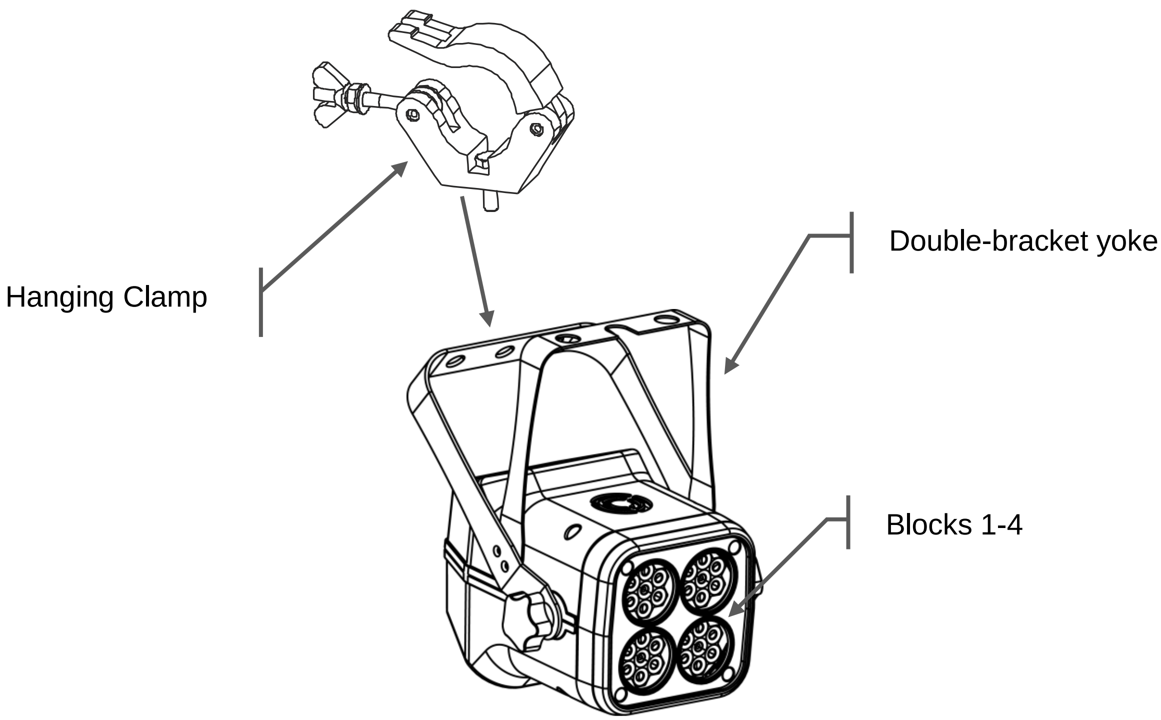
Rigging

The fixture includes a mounting yoke to which a rigging clamp can be attached. You must supply your own clamp and make sure the clamp is capable of supporting the weight of this fixture. You can order "C" and "O" clamps from any CHAUVET dealer or distributor (CLP-15, CLP-06 recommended).

If you are using this fixture for down lighting, you must use at least one safety cable/chain for each fixture in addition to the double-bracket yoke.

If hanging the fixture for overhead use, please follow the below steps:

1) Block access below the work area and use a suitable and stable platform when installing or servicing fixture.
2) Always use safety cables. The safety cable must be capable of holding 10 times the weight of the fixture.
3) Verify that the structure can hold 10 times the weight of all to-be installed fixtures.



The hanging clamp is sold separately

Fixture Linking

You will need a serial data link to run light shows of one or more fixtures using a DMX controller or to run synchronized shows on two or more fixtures set to a master/slave operating mode. The combined number of channels required by all the fixtures on a serial data link determines the number of fixtures the data link can support.

The fixtures must be linked using DMX cable in a daisy chain (serial) fashion. To comply with the EIA-485 standard, no more than 32 fixtures should be connected on one daisy chain without using a DMX optically-isolated splitter. Doing otherwise may result in deterioration of the digital DMX signal.

USITT recommends limiting the total length of the DMX cable (from the first fixture/controller to the last fixture) to 300 ~ 455 m (985 ~ 1,500 ft).

Data Cabling

To link fixtures together you must obtain data cables. You can purchase CHAUVET certified DMX cables directly from a dealer/distributor or construct your own cable. If you choose to create your own cable, please use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

DMX Data Cable

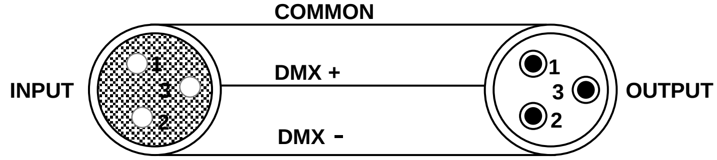
Use a Belden© 9841 or equivalent cable which meets the specifications for EIA RS-485 applications. Standard microphone cables cannot transmit DMX data reliably over long distances. The cable must have the following characteristics:

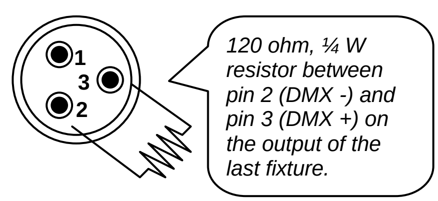
Type:	*shielded, 2-conductor twisted pair*
Maximum capacitance between conductors:	*30 pF/ft*
Maximum capacitance between conductor and shield:	*55 pF/ft*
Maximum resistance:	*20 ohms/1000 ft*
Nominal impedance:	*100 – 140 ohms*

Cable Connectors

The cable must have a male XLR connector on one end and a female XLR connector on the other end.

DMX connector configuration





To avoid signal transmission problems and interference, it is always advisable to connect a DMX signal terminator.

Do not allow contact between the common and the fixture's chassis ground. Grounding the common can cause a ground loop, and your fixture may perform erratically. Test cables with an ohmmeter to verify correct polarity, and to make sure the pins are not grounded or shorted to the shield or each other.

3-Pin to 5-Pin Conversion Chart

If you use a controller with a 5-pin DMX output connector, you will need to use a 5-pin to 3-pin adapter. CHAUVET Model No: DMX5M, or DMX5F.

The chart below details a proper cable conversion:

3-PIN TO 5-PIN CONVERSION CHART

Conductor	3-Pin Female (Output)	5-Pin Male (Input)
Ground/Shield	Pin 1	Pin 1
Data (-) signal	Pin 2	Pin 2
Data (+) signal	Pin 3	Pin 3
Not used		Pin 4
Not used		Pin 5

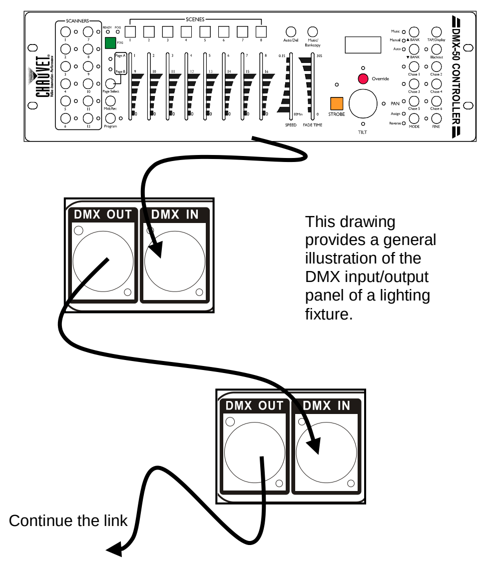
Setting up a DMX Serial Data Link

1. Connect the (male) 3-pin connector side of the DMX cable to the output (female) 3-pin connector of the controller.
2. Connect the end of the cable coming from the controller which will have a (female) 3-pin connector to the input connector of the next fixture consisting of a (male) 3-pin connector.
3. Then, proceed to connect from the output as stated above to the input of the following fixture and so on.

CHAUVET Certified DMX Data Cables

Order Code	Description
DMX1.5	DMX Cable 1.5 m/4.9 ft
DMX4.5	DMX Cable 4.5 m/14.8 ft
DMX10	DMX Cable 10 m/32.8 ft

Universal DMX Controller

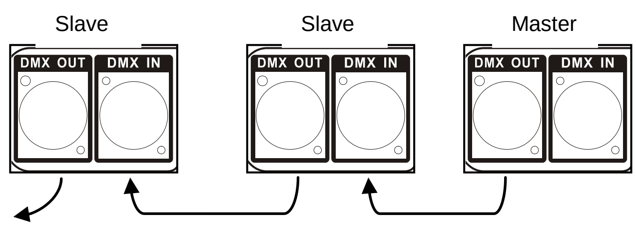


This drawing provides a general illustration of the DMX input/output panel of a lighting fixture.

Master/Slave Fixture Linking

1. Connect the (male) 3-pin connector side of the DMX cable to the output (female) 3-pin connector of the first fixture.
2. Connect the end of the cable coming from the first fixture which will have a (female) 3-pin connector to the input connector of the next fixture consisting of a (male) 3-pin connector. Then, proceed to connect from the output as stated above to the input of the following fixture and so on.

Often, the setup for Master-Slave and Standalone operation requires that the first fixture in the chain be initialized for this purpose via settings in the control panel. Secondly, the fixtures that follow may also require a slave setting. Please consult the "Operating Instructions" section in this manual for complete instructions for this type of setup and configuration.



4. OPERATING INSTRUCTIONS

Control Options

The COLORdash™ Block is addressable in the DMX range of 001 to 512. In its simplest control form, this allows for the control of up to 46 fixtures in the 11-channel Stage 1 personality; however, a secondary ID address system exists for use in a limited DMX universe and architectural environments. The ID address system allows the user to assign up to 66 fixtures within the same DMX address; in effect, multiplying the control of COLORdash™ Block within a single universe to 3,036 fixtures. The COLORdash™ Block ID address system is accessed using DMX channel 10 (Stage 1). Consideration must be placed when programming live performances or cues that need to trigger on demand or on a time line. So, to remain within one-second execution time, program no greater than 10 fixtures on ID addressing per DMX channel.

DMX control without ID address

The COLORdash™ Block operates on 12 channels of DMX (STAGE 1). Address each fixture in increments of 11 channels. (for example: 1, 12, 23, 34, 45, etc.) To save time you can use the same DMX address for each fixture. All fixtures will then respond simultaneously to control. You may also group your fixtures and address those groups alike for faster programming and control.

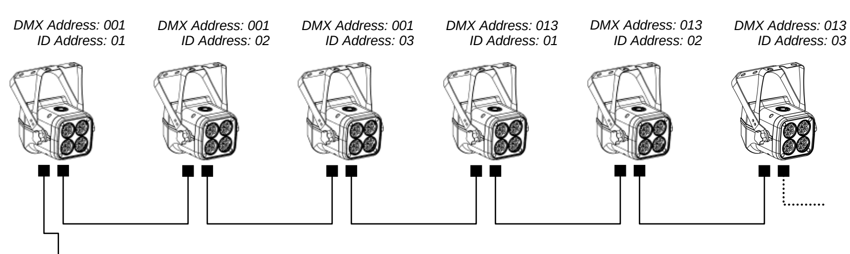
1. Access the control panel function by pressing **<MENU>** until the ***RUN*** is displayed.
2. Press **<ENTER>** and use the **<UP/DOWN>** to select ***DMX*** function.
3. Then, Press **<MENU>** until ***ADDRESS*** is displayed.
4. Pres **<ENTER>.**
6. Use **<UP/DOWN>** to increase or decrease channels between 001 and 512.
7. Press **<ENTER>** to confirm action. Then press **<MENU>** to exit.

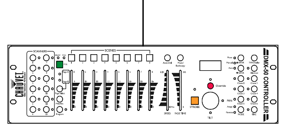
Deactivate ID addressing in each fixture by setting panel function ***ID ON/OFF*** to ***OFF***.
MENU>**SETTINGS**>**ID ON/OFF>OFF**

If ID addressing is not deactivated in the fixture's control panel function, unintended results may occur if values are present in channel 10. Make sure values on channel 10 are set to 0.

DMX addressing with ID address

1. Follow instructions 1 ~ 7 in the previous section for DMX addressing.
2. Activate ID addressing in each fixture by setting panel function ***ID ON/OFF*** to ***ON***.
   MENU>**Settings**>**ID ON/OFF**>**ON]**
3. For every DMX starting address the user can set 66 separate ID addresses.
4. Set ID addresses in each fixture by setting panel function ***ID address*** to incremental values. (for example: 1, 2, 3, 4, 5, 6, etc.).
   MENU>**Settings**>**ID address**>**01~66**
5. ID addresses are accessible using channel 10 (Stage 1).





Universal DMX Controller

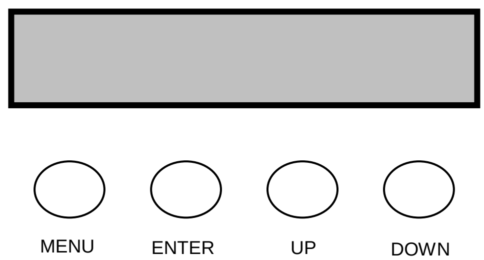
The figure above shows a simple DMX layout which has used three units at each DMX address. The three units have different ID addresses which allows the user to collectively control the whole group of units at that DMX address by setting channel 10 to 0, or to control each unit independently by first selecting the DMX address and then by using channel 10 to locate the target ID address.

Setting the Starting DMX address

Each fixture requires a starting address from 1 through 512. A fixture requiring one or more channels for control begins to read the data on the channel indicated by the starting address. For example, a fixture that occupies or uses seven channels of DMX and is addressed to start on DMX channel 100, will read data from channels: 100, 101, 102, 103, 104, 105 and 106. Choose starting addresses so that the channels used do not overlap. In addition, you should note the starting address selected for future reference. The COLORdash™ Block uses up to 12 channels of DMX (BLOCK). If this is your first time using DMX, we recommend reading the “DMX Primer” in the “Appendix” section.

Control Panel Functions

All fixture functions and settings are accessible via the built-in control panel interface.



BUTTON	**FUNCTION**
MENU	Exits from the current menu or function
ENTER	Enables the currently displayed menu or sets the currently selected value in to the selected function
UP	Navigates upwards through the menu list and increases the numeric value when in a function
DOWN	Navigates downwards through the menu list and decreases the numeric value when in a function

Password Menu Lockout

The COLORdash™ Block has a password lock-out feature. Enable/disable this by using the Control Panel.

This feature uses a default, non-changeable, password of <UP>, <DOWN>, <UP>, <DOWN>. After 30 seconds of inactivity, the lockout will automatically engage once it has been enabled.

Upload Customs

The custom programs in the COLORdash™ Block may be transferred (copied) from one fixture to another, thus giving the ability to have to only program them on a single fixture, and then duplicate this on several others. This is referenced in the control panel as ***Upload***. Follow the steps below for this process. On all fixtures that are going to receive the upload, set them on SLAVE operation.

1. Disconnect from DMX controller.
2. Using DMX cables, daisy chain the slave fixtures from the output of the fixture with the custom program to be copied to the other fixtures.
3. Press **<MENU>.**
4. Use **<UP/DOWN>** to select ***Settings*** in the control panel and press **<ENTER>.**
5. Use **<UP/DOWN>** to select ***Upload Customs***. Press **<ENTER>**.
6. Use **<UP/DOWN>** to input the password. The ***customs*** portion of the screen will begin to flash. Press **<ENTER>** to confirm and begin the transfer. ***Uploading Customs*** will display.
7. The slave fixtures will display green if the transfer is successful. They will display red if the transfer

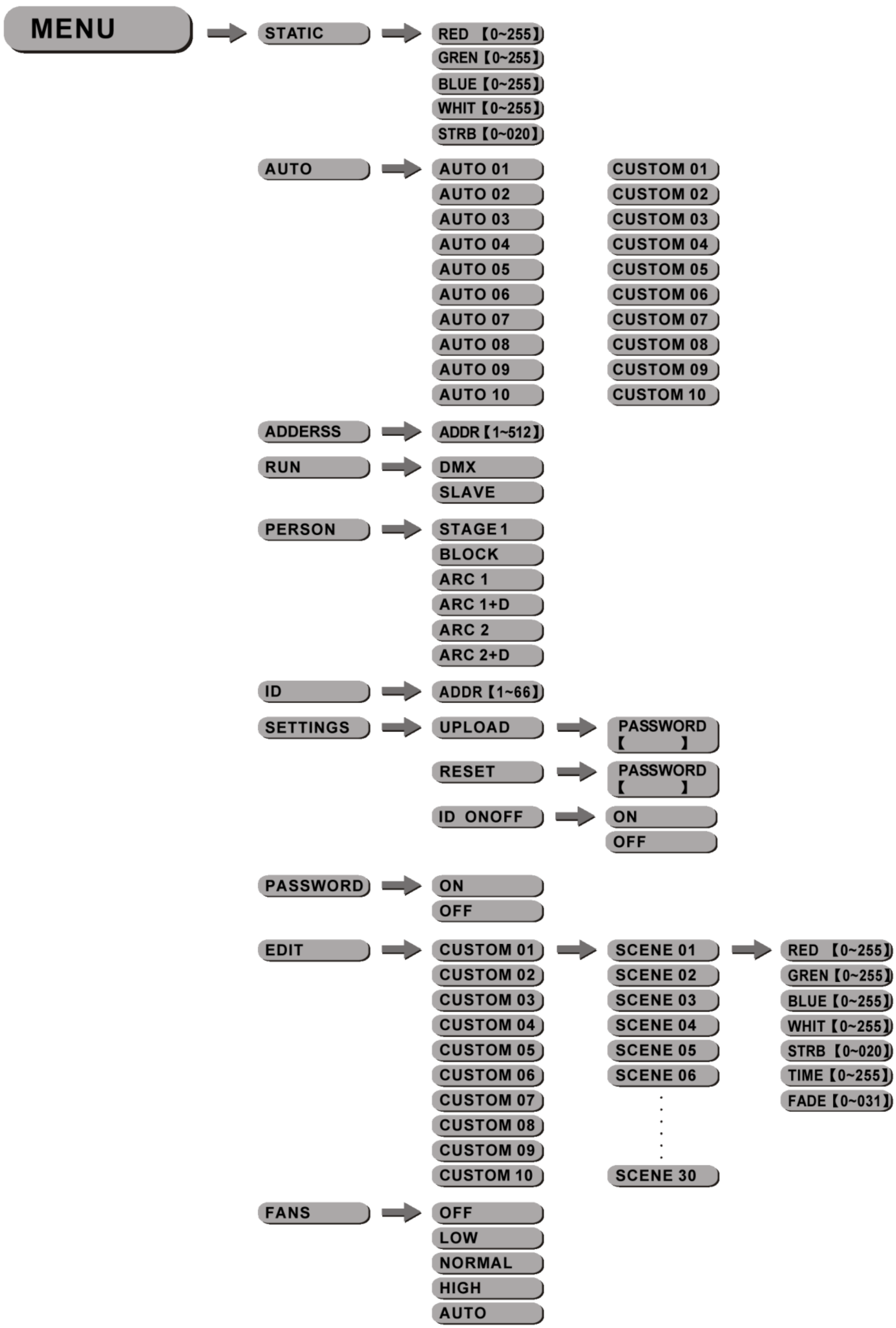
The units receiving the new custom programs from the master must be set to “SLAVE”. Otherwise, they will not allow receipt of the programs.

Menu Map

MAIN FUNCTION	SUB-FUNCTION	SELECTION	INSTRUCTION
1. STATIC (Static Color)	Red	000 ~ 255* (0 ~ 100%) *Strobe range is 0~20 Hz	User can combine Red, Green, Blue and White to generate a custom color Select strobing frequency between 0 and 20 Hz
	Green		
	Blue		
	White		
	Strobe		
2. AUTO	Auto	(1~10)	Choose from 10 automatic programs
	Custom	(1~10)	Choose from 10 programs that be customized under the “edit custom” menu option
3. ADDRESS		001 ~ 512	Sets the DMX starting address
4. RUN		DMX/Slave	Sets the operating mode for the fixture: to receive signal from a DMX controller (DMX) or to receive signal from the DMX out of another fixture
5. PERSON (Personality)		Stage 1	11-channel RGBW+DMS, ID
		Block	12-channel RGB for each block (1 of 4)
		Arc1	3-channel RGB
		Arc1+D	4-channel RGB+D
		Arc2	4-channel RGBW
		Arc2+D	5-channel RGBW+D
6. ID (ID Address)		0~66	Assigns the ID address to a fixture
7. SETTINGS	ID	On/Off	Turns ID addressing on or off
	Reset to factory?	(Password required)	Resets the fixture to the default, factory settings
	Upload custom?	(Password required)	Uploads a fixture’s custom program to another fixture (same fixture only)
8. PASSWORD		On/Off	Turns the password on or off (after 30 s of no activity, the control panel will turn on after selecting On)
9. EDIT (Edit Custom)	Custom (1~10) *-(Scene 01-30)*	Red	User can combine Red, Green, Blue and White to generate a custom color (0~255)
		Green	
		Blue	
		White	
		Strobe	Select strobing frequency (0 ~ 20 Hz)
		Time	(0~255)
		Fade	(0~255)
10. FANS		AUTO	Fan speed controlled automatically
		HIGH	Fan speed at its maximum
		NORMAL	Fan speed at its median
		LOW	Fan speed at its lowest/most quiet
		OFF	Fan off

When the fan speed is at normal, low, or off the fixture will automatically override the speed as a protection, if the temperature becomes too hot.

The default factory password is <UP>, <DOWN>, <UP>, <DOWN>.


MENU
STATIC
RED 【0~255】
GREN 【0~255】
BLUE 【0~255】
WHIT 【0~255】
STRB 【0~020】
AUTO
AUTO 01
AUTO 02
AUTO 03
AUTO 04
AUTO 05
AUTO 06
AUTO 07
AUTO 08
AUTO 09
AUTO 10
CUSTOM 01
CUSTOM 02
CUSTOM 03
CUSTOM 04
CUSTOM 05
CUSTOM 06
CUSTOM 07
CUSTOM 08
CUSTOM 09
CUSTOM 10
ADDERSS
ADDR【1~512】
RUN
DMX
SLAVE
PERSON
STAGE 1
BLOCK
ARC 1
ARC 1+D
ARC 2
ARC 2+D
ID
ADDR【1~66】
SETTINGS
UPLOAD
PASSWORD 【 】
RESET
PASSWORD 【 】
ID ONOFF
ON
OFF
PASSWORD
ON
OFF
EDIT
CUSTOM 01
CUSTOM 02
CUSTOM 03
CUSTOM 04
CUSTOM 05
CUSTOM 06
CUSTOM 07
CUSTOM 08
CUSTOM 09
CUSTOM 10
SCENE 01
SCENE 02
SCENE 03
SCENE 04
SCENE 05
SCENE 06
SCENE 30
RED 【0~255】
GREN 【0~255】
BLUE 【0~255】
WHIT 【0~255】
STRB 【0~020】
TIME 【0~255】
FADE 【0~031】
FANS
OFF
LOW
NORMAL
HIGH
AUTO

DMX Channel Values

The COLORdash™ Block has six DMX channel configurations: STAGE 1, BLOCK, ARC 1, ARC 1 + D, ARC 2, and ARC 2 + D.

STAGE 1

CHANNEL	VALUE	FUNCTION
1		**Dimmer**
	000 ⇔ 255	0 ⇔ 100%
2		**Red**
		(or STEP TIME when CUS.01-10 in CH.8 is activated)
	000 ⇔ 255	0 ⇔ 100%
3		**Green**
		(or FADE TIME when CUS.01-10 in CH.8 is activated)
	000 ⇔ 255	0 ⇔ 100%
4		**Blue**
	000 ⇔ 255	0 ⇔ 100%
5		**White**
	000 ⇔ 255	0 ⇔ 100%
6		**Color Macro + White Balance**
	000 ⇔ 010	No Function
	011 ⇔ 035	Red 100%/ Green Up/ Blue 0%
	036 ⇔ 060	Red Down/ Green 100%/ Blue 0%
	061 ⇔ 085	Red 0%/ Green 100%/ Blue Up
	086 ⇔ 110	Red 0%/ Green Down/Blue 100%
	111 ⇔ 135	Red Up/ Green 0%/Blue 100%
	136 ⇔ 160	Red 100%/ Green 0%/ Blue Down
	161 ⇔ 185	Red 100%/ Green Up/ Blue Up
	186 ⇔ 210	Red Down/ Green Down/ Blue 100%
	211 ⇔ 215	White 1: 3200 K
	216 ⇔ 220	White 2: 3400 K
	221 ⇔ 225	White 3: 4200 K
	226 ⇔ 230	White 4: 4900 K
	231 ⇔ 235	White 5: 5600 K
	236 ⇔ 240	White 6: 5900 K
	241 ⇔ 245	White 7: 6500 K
	246 ⇔ 250	White 8: 7200 K
	251 ⇔ 255	White 9: 8500 K
7		**Strobe**
	000 ⇔ 004	No Function
	005 ⇔ 255	0 ⇔ 20 Hz
8		**Fans, Auto + Custom Programs**
	000 ⇔ 010	Set to display fan setting
	011 ⇔ 020	Fans OFF (hold channel value for 5 seconds)
	021 ⇔ 030	Fans LOW (hold channel value for 5 seconds)
	031 ⇔ 040	Fans NORMAL (hold channel value for 5 seconds)
	041 ⇔ 050	Fans HIGH (hold channel value for 5 seconds)
	051 ⇔ 060	Fans AUTO (hold channel value for 5 seconds)
	061 ⇔ 070	Auto 1
	071 ⇔ 080	Auto 2
	081 ⇔ 090	Auto 3
	091 ⇔ 100	Auto 4
	101 ⇔ 110	Auto 5
	111 ⇔ 120	Auto 6
	121 ⇔ 130	Auto 7
	131 ⇔ 140	Auto 8
	141 ⇔ 150	Auto 9
	151 ⇔ 160	Auto 10
	161 ⇔ 170	Custom 1
	171 ⇔ 180	Custom 2
	181 ⇔ 190	Custom 3
	191 ⇔ 200	Custom 4
	201 ⇔ 210	Custom 5
	211 ⇔ 220	Custom 6
	221 ⇔ 230	Custom 7
	231 ⇔ 240	Custom 8
	241 ⇔ 250	Custom 9
	251 ⇔ 255	Custom 10
9	000 ⇔ 255	**Auto Speed (only when CH.7 is between 061 ~ 255)**

STAGE 1 (Cont.)

CHANNEL	ID ADDRESSING					
	VALUE	ID	VALUE	ID	VALUE	ID
9	000 ⇔ 009	All IDs	212	ID 23	235	ID 46
	010 ⇔ 019	ID 1	213	ID 24	236	ID 47
	020 ⇔ 029	ID 2	214	ID 25	237	ID 48
	030 ⇔ 039	ID 3	215	ID 26	238	ID 49
	040 ⇔ 049	ID 4	216	ID 27	239	ID 50
	050 ⇔ 059	ID 5	217	ID 28	240	ID 51
	060 ⇔ 069	ID 6	218	ID 29	241	ID 52
	070 ⇔ 079	ID 7	219	ID 30	242	ID 53
	080 ⇔ 089	ID 8	220	ID 31	243	ID 54
	090 ⇔ 099	ID 9	221	ID 32	244	ID 55
	100 ⇔ 109	ID 10	222	ID 33	245	ID 56
	110 ⇔ 119	ID 11	223	ID 34	246	ID 57
	120 ⇔ 129	ID 12	224	ID 35	247	ID 58
	130 ⇔ 139	ID 13	225	ID 36	248	ID 59
	140 ⇔ 149	ID 14	226	ID 37	249	ID 60
	150 ⇔ 159	ID 15	227	ID 38	250	ID 61
	160 ⇔ 169	ID 16	228	ID 39	251	ID 62
	170 ⇔ 179	ID 17	229	ID 40	252	ID 63
	180 ⇔ 189	ID 18	230	ID 41	253	ID 64
	190 ⇔ 199	ID 19	231	ID 42	254	ID 65
	200 ⇔ 209	ID 20	232	ID 43	255	ID 66
	210	ID 21	233	ID 44		
	211	ID 22	234	ID 45		

CHANNEL	VALUE	FUNCTION
11		**Block**
	000 ⇔ 010	Block 1, Block 2, Block 3, Block 4
	011 ⇔ 021	Block 1
	022 ⇔ 032	Block 2
	033 ⇔ 043	Block 3
	044 ⇔ 054	Block 4
	055 ⇔ 065	Block 3, Block 4
	066 ⇔ 076	Block 1, Block 2
	077 ⇔ 087	Block 2, Block 3
	088 ⇔ 098	Block 3, Block 4
	099 ⇔ 109	Block 4
	110 ⇔ 120	Block 1, Block 2, Block 3
	121 ⇔ 131	Block 2, Block 3, Block 4
	132 ⇔ 142	Block 3, Block 4
	143 ⇔ 153	Block 1
	154 ⇔ 164	Block 2, Block 4
	165 ⇔ 175	Block 1, Block 3
	176 ⇔ 186	Block 2
	187 ⇔ 197	Block 1, Block 3
	198 ⇔ 208	Block 1, Block 2, Block 4
	209 ⇔ 219	Block 1, Block 2
	220 ⇔ 230	Block 4
	231 ⇔ 241	Block 2, Block 3, Block 4
	242 ⇔ 255	Block 1, Block 2, Block 3, Block 4

BLOCK

CHANNEL	VALUE	FUNCTION	CHANNEL	VALUE	FUNCTION
1	000 ⇔ 255	**Block 1 Red** 0 ⇔ 100%	**7**	000 ⇔ 255	**Block 3 Red** 0 ⇔ 100%
2	000 ⇔ 255	**Block 1 Green** 0 ⇔ 100%	**8**	000 ⇔ 255	**Block 3 Green** 0 ⇔ 100%
3	000 ⇔ 255	**Block 1 Blue** 0 ⇔ 100%	**9**	000 ⇔ 255	**Block 3 Blue** 0 ⇔ 100%
4	000 ⇔ 255	**Block 2 Red** 0 ⇔ 100%	**10**	000 ⇔ 255	**Block 4 Red** 0 ⇔ 100%
5	000 ⇔ 255	**Block 2 Green** 0 ⇔ 100%	**11**	000 ⇔ 255	**Block 4 Green** 0 ⇔ 100%
6	000 ⇔ 255	**Block 2 Blue** 0 ⇔ 100%	**12**	000 ⇔ 255	**Block 4 Blue** 0 ⇔ 100%

ARC1

CHANNEL	VALUE	FUNCTION
1	000 ⇔ 255	**Red** 0 ⇔ 100%
2	000 ⇔ 255	**Green** 0 ⇔ 100%
3	000 ⇔ 255	**Blue** 0 ⇔ 100%

ARC1+D

CHANNEL	VALUE	FUNCTION
1	000 ⇔ 255	**Dimmer** 0 ⇔ 100%
2	000 ⇔ 255	**Red** 0 ⇔ 100%
3	000 ⇔ 255	**Green** 0 ⇔ 100%
4	000 ⇔ 255	**Blue** 0 ⇔ 100%

ARC2

CHANNEL	VALUE	FUNCTION
1	000 ⇔ 255	**Red** 0 ⇔ 100%
2	000 ⇔ 255	**Green** 0 ⇔ 100%
3	000 ⇔ 255	**Blue** 0 ⇔ 100%
4	000 ⇔ 255	**White** 0 ⇔ 100%

ARC2+D

CHANNEL	VALUE	FUNCTION
1	000 ⇔ 255	**Dimmer** 0 ⇔ 100%
2	000 ⇔ 255	**Red** 0 ⇔ 100%
3	000 ⇔ 255	**Green** 0 ⇔ 100%
4	000 ⇔ 255	**Blue** 0 ⇔ 100%
5	000 ⇔ 255	**White** 0 ⇔ 100%

Important Notes about STAGE 1 DMX Operation

Master Dimmer

- Channel 1 controls the intensity of the currently projected color
- When the slider is at the highest position (255), then the intensity of the output is at the maximum.

Red, Green Blue and White Color Selection

- Channels 2, 3, 4 and 5 control the intensity ratio of each of the Red, Green, Blue, & White LEDs.
- Channels 2, 3, 4 and 5 can be combined together to create over 42 billion color combinations.

Strobe

- Channel 7 controls the strobe of Channels 2 through 5.
- Channel 7 has priority over Channels 2, 3, 4, & 5.
- Speed of the strobe is adjustable from 0 ~ 20 Hz.

Color Macros

- Channel 6 selects the required Color Macro.
- Channel 6 has priority over Channels 2, 3, 4, & 5.
- Channel 1 is used to control the intensity of the current Color Macro.

ID Address Selection

- Use channel 10 to select the target ID address.
- Each independent DMX address can have up to 66 ID addressed fixtures.
- ID address 0 allows control of all fixtures simultaneously.

Auto & Custom Programs

- Channel 8 selects the preset Auto/Custom programs 1~10
- When activating the Auto/Custom programs, it is then possible to control the Step time and Fade time by using Channels 2 & 3, respectively.

Contact Us

World Wide

General Information

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5. APPENDIX

DMX Primer

There are 512 channels in a DMX connection. Channels may be assigned in any manner. A fixture capable of receiving DMX will require one or a number of sequential channels. The user must assign a starting address on the fixture that indicates the first channel reserved in the controller. There are many different types of DMX controllable fixtures and they all may vary in the total number of channels required. Choosing a start address should be planned in advance. Channels should never overlap. If they do, this will result in erratic operation of the fixtures whose starting address is set incorrectly. You can however, control multiple fixtures of the same type using the same starting address as long as the intended result is that of unison movement or operation. In other words, the fixtures will be slaved together and all respond exactly the same.

DMX fixtures are designed to receive data through a serial Daisy Chain. A Daisy Chain connection is where the DATA OUT of one fixture connects to the DATA IN of the next fixture. The order in which the fixtures are connected is not important and has no effect on how a controller communicates to each fixture. Use an order that provides for the easiest and most direct cabling. Connect fixtures using shielded two conductor twisted pair cable with three pin XLR male to female connectors. The shield connection is pin 1, while pin 2 is Data Negative (S-) and pin 3 is Data positive (S+). CHAUVET carries 3-pin XLR DMX compliant cables, DMX-10 (33’), DMX-4.5 (15’) and DMX-1.5 (5’)

General Maintenance

To maintain optimum performance and minimize wear fixtures should be cleaned frequently. Usage and environment are contributing factors in determining frequency. As a general rule, fixtures should be cleaned at least twice a month. Dust build up reduces light output performance and can cause overheating. This can lead to reduced LED life and increased mechanical wear. Be sure to power off fixture before conducting maintenance.

Unplug fixture from power. Use a vacuum or air compressor and a soft brush to remove dust collected on external vents and internal components; be sure to prevent the fans from turning during this process, as it can cause damage to the fans. Clean all glass when the fixture is cold with a mild solution of glass cleaner or Isopropyl Alcohol and a soft lint free cotton cloth or lens tissue. Apply solution to the cloth or tissue and drag dirt and grime to the outside of the lens. Gently polish optical surfaces until they are free of haze and lint.

The cleaning of external optical lenses must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the unit’s optics. Clean with soft cloth using normal glass cleaning fluid. Always dry the parts carefully. Clean the external optics at least every 20 days.

Returns Procedure

Returned merchandise must be sent prepaid and in the original packing; call tags will not be issued. Package must be clearly labeled with a Return Merchandize Authorization Number (RMA #). Products returned without the RMA # will be refused. Call CHAUVET and request an RMA # prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to pack fixture properly; any shipping damage resulting from inadequate packaging is the customer’s responsibility. As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

CHAUVET reserves the right to use its own discretion to repair or replace product(s).

Note: **If you are given an RMA #, please include the following information on a piece of paper inside the box:**

1) Your name
2) Your address
3) Your phone number
4) The RMA #
5) A brief description of the symptoms

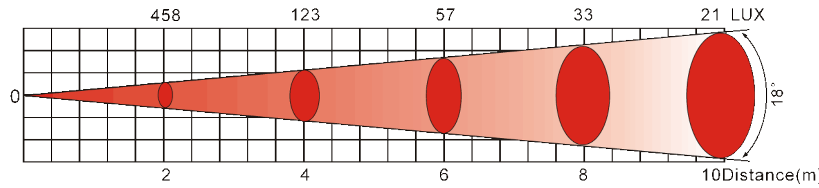
Claims

Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise. It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Any other claim for items such as missing component/part, damage not related to shipping, and concealed damage, must be made within seven (7) days of receiving merchandise.

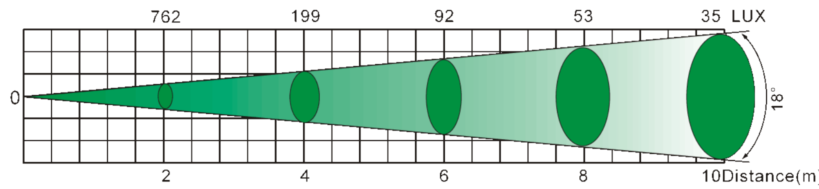
Photometric Data

18° LENS

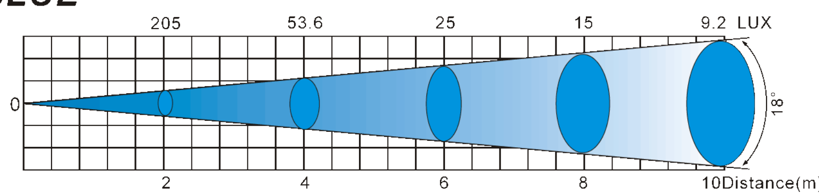
RED



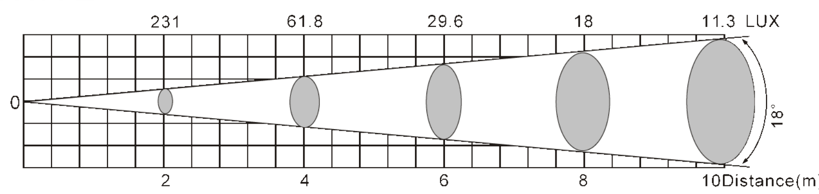
GREEN



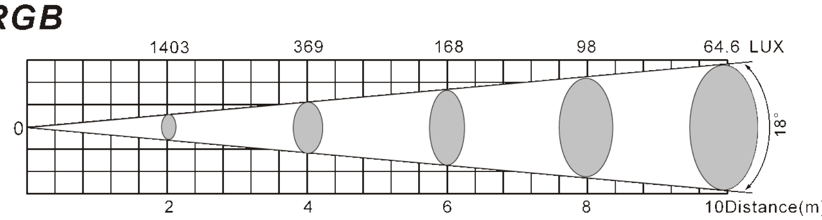
BLUE



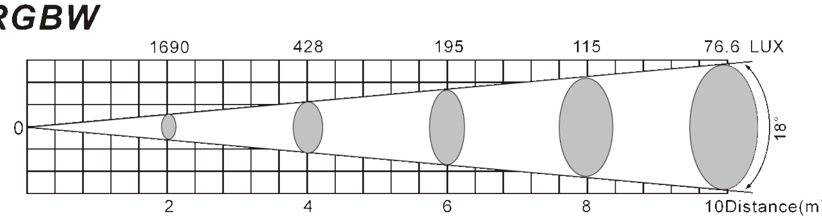
WHITE



RGB



RGBW

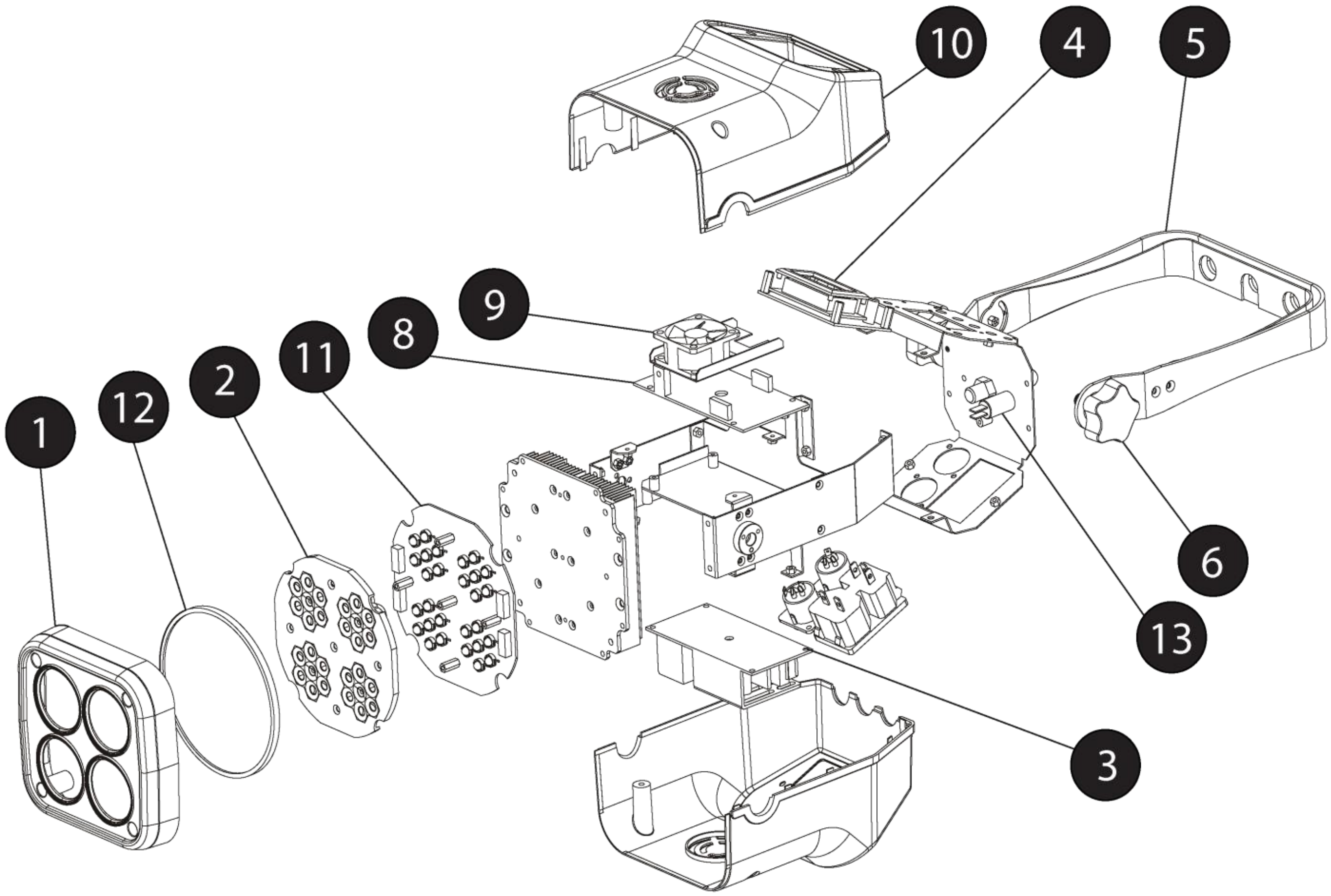


COLORdash™ Block Service Maintenance Guide

SYMPTOM	POSSIBLE CAUSE(S)	POSSIBLE ACTION(S)
General low light intensity	• Dirty lens assembly • Misaligned lens assembly	• Clean the fixture regularly. • Install lens assembly properly.
White LED does not illuminate	• Faulty LED • Faulty LED driver	• Replace the LED PCB *(Part#: P222-CDBLED).* • Replace the LED Driver PCB *(Part # P172-CDBDRV).*
Both red, green or blue LED's are not illuminating	• Opened LED. If any red, green or blue LED opens up, the other LED will not illuminate. This is because they are connected in series. • Faulty LED driver	• Replace the LED PCB *(Part#: P222-CDALED).* • Replace the LED Driver PCB *(Part # P172-CDBDRV).*
Only one red, green or blue LED illuminates	• Short-circuited LED. If any red, green or blue LED shortens, only the other LED will illuminate. This is because they are connected in series.	• Replace the LED PCB *(Part#: P222-CDBLED).*
None of the LEDs are illuminating	• Faulty LED PCB • Faulty LED Driver PCB • No Auto or Static mode response; faulty main PCB	• Replace LED PCB *(Part#: P222-CDBLED)* • Replace LED Driver PCB (*Part#: P172-CDBDRV*) • Replace Main PCB *(Part#: P170-CDBDSY)*
Breaker/Fuse keeps blowing	• Excessive circuit load • Short circuit along the power wires	• Check total load placed on the electrical circuit. • Check for a short in the electrical wiring (internal and/or external).
Device does not power up (no display)	• No power • Loose power cord • Faulty internal power supply • Faulty Main Board	• Check for power on Mains. • Check power cord • Replace internal power supply *(Part#: P140-CDBELTR)* • Replace Main PCB *(Part#: P170-CDBDYS)*
Fixture is not responding to DMX	• Wrong DMX addressing • Damaged DMX cables • Wrong polarity settings on the controller • Loose DMX cables • Faulty DMX interface • Faulty Main PCB	• Check Control Panel and unit addressing • Check DMX cables • Check polarity switch settings on the controller • Check cable connections • Replace DMX interface *(Part#: P170-CDBDMX)* • Replace Main PCB *(Part#: P170-CDBDYS)*
Loss of signal	• Non DMX cables • Bouncing signals • Long cable / Low level signal • Too many fixtures • Interference from AC wires	• Use only DMX compatible cables • Install terminator as suggested. • Install amplifier right after fixture with strong signal. • Install an optically coupled DMX splitter after unit #32. • Keep DMX cables separated from power cables or black lights.

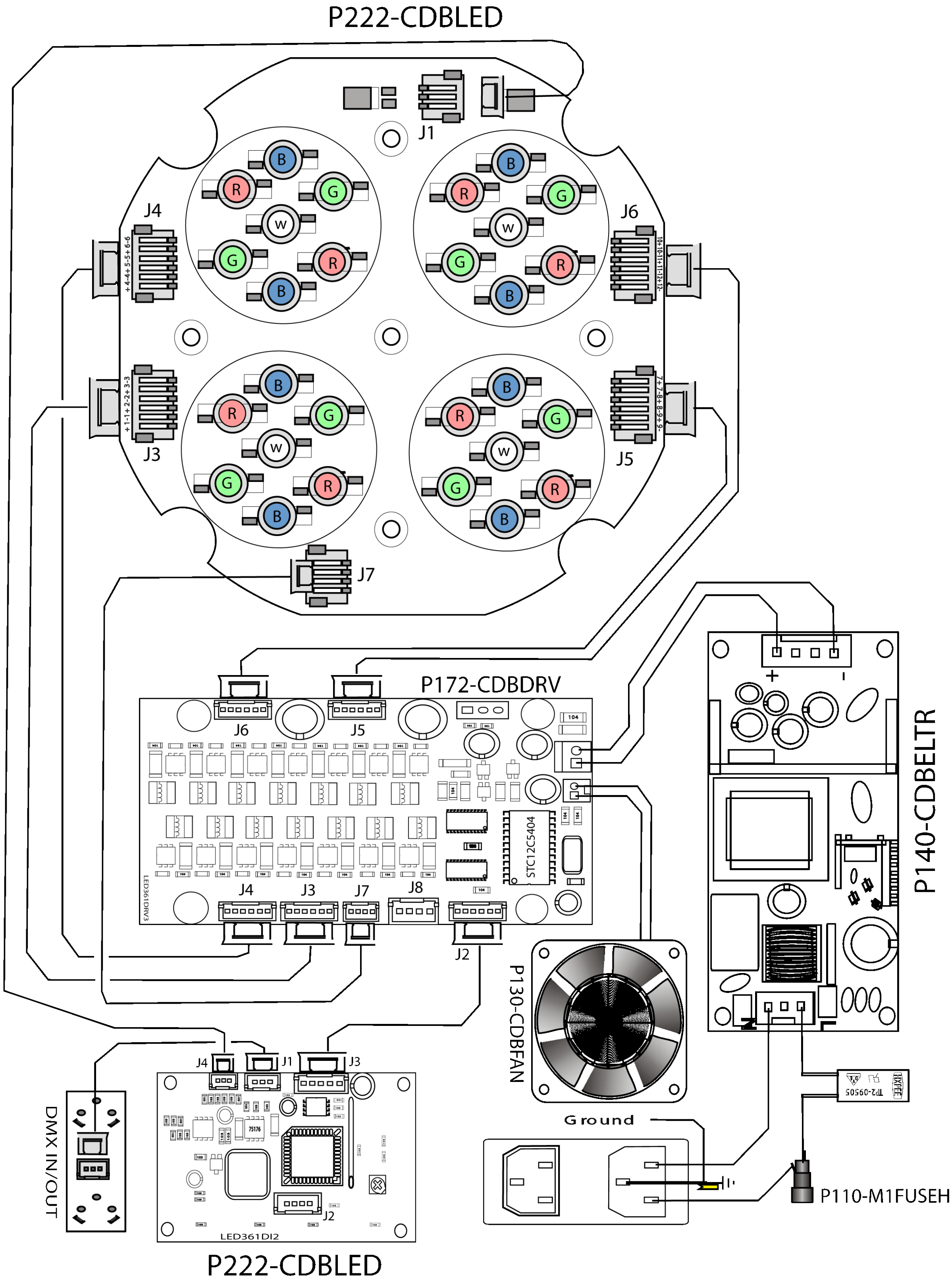
If you still have a problem after trying the above solutions, please contact CHAUVET Technical Support. (See "Contact Us")

Exploded View



	Description	Part #
1	Front black plastic Cover	P111-CDBBFC
2	LED lens (1 of 4)	P200-CDBLENS
3	Electronic Transformer 100-240 V, 50/60 Hz	P140-CDBELTR
4	Display/Master PCB	P170-CDBDSY
5	Bracket/Floor stand	P110-CDBRKT
6	Bracket Knob	P111-M1KNOB
7	Power/signal input/output	P111-M1PWR(POWER) P111-M1SIG(SIGNAL)
8	LED Driver PCB	P172-DCBDRV
9	Cooling fan 12 V, 0.16 A	P130-CDBFAN
10	Main Case Cover (X2)	P100-CDBPLTB
11	LED metal-core PCB assembly	P222-CDBLED
12	Plastic clear lens cover with rubber insulator	P111-CDBFCP
13	Fuse holder 250 V, 6.3 A	P110-M1FUSEH
14	Safety attachment point (eyebolt)	P100-CDBEYE
15	M10 screw	P100-CDBM10

Wiring Diagram



Technical Specifications

WEIGHT & DIMENSIONS
Length..9.8 in (250 mm)
Width..7.7 in (195 mm)
Height..6 in (150 mm)
Weight..4.6 lbs (2.08 kg)

POWER
Autoswitching internal power supply..100 ~ 240 VAC, 50/60 Hz
Power Consumption @ 120 V, 60 Hz..41.2 W (0.5 A) max
Power Consumption @ 230 V, 50 Hz..40.2 W (0.3 A) max
Additional Power Output..20 units max @ 120 V
Additional Power Output..30 units max @ 230 V

LIGHT SOURCE
LED..1 W, 350 mA, 28 (8 Red, 8 Blue, 8 Green, 4 White), 50,000 hrs

PHOTO OPTIC (WITH 18° LENS ASSEMBLY)
Luminance @ 2 m..1,690 lux
Beam Angle..17°
Field Angle..32°

COOLING
Forced air cooling..40x18 mm, 12 V fan
Maximum ambient operating temperature..104° F (40° C)

CONTROL & PROGRAMMING
Data input..locking 3-pin XLR male socket
Data output..locking 3-pin XLR female socket
Data pin configuration..pin 1 shield, pin 2 (-), pin 3 (+)
Protocols..USITT DMX-512-A
DMX Channels..User Configurable: 3, 4, 5, or 9 channels

STANDARD ORDERING INFORMATION
COLORdash™ Block..COLORDASHBLOCK
Power extension cable..EXT-2

WARRANTY INFORMATION
Warranty..2-year limited warranty